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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------|------------------------------|------------------------|---------------------|------------------|
| 10/597,346 | 08/23/2006 | Jeffrey P. Reistroffer | | 9676 |
| JEFFREY P. RI | 7590 11/30/201 EISTROFFER | EXAMINER | | |
| P.O. BOX 728 | | | JOHNSON, STEPHEN | |
| PLAINS, MT 59859 | | | ART UNIT | PAPER NUMBER |
| | | | 3641 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 11/30/2011 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | | Application No. | Applicant(s) | | | |
|--|---|--|---|--|--|--|
| | | 10/597,346 | REISTROFFER, JEFFREY P. | | | |
| | | Examiner | Art Unit | | | |
| | | STEPHEN M. JOHNSON | 3641 | | | |
| Period for | - The MAILING DATE of this communication app r Reply | ears on the cover sheet with the c | orrespondence address | | | |
| WHICI - Extens after S - If NO I - Failure Any re | DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 (SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, pply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time iill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE! | l. ely filed the mailing date of this communication. 0 (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1) 🔯 📗 | Responsive to communication(s) filed on 14 November 2011. | | | | | |
| · <u> </u> | | action is non-final. | | | | |
| , — | An election was made by the applicant in response to a restriction requirement set forth during the interview on | | | | | |
| | the restriction requirement and election have been incorporated into this action. | | | | | |
| 4) 🔲 💲 | Since this application is in condition for allowar | · | | | | |
| | closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. | | | |
| Dispositio | on of Claims | | | | | |
| 5) 🛛 (| Claim(s) <u>1,2,7,11-18,26,35,36,44,47,49 and 76</u> | is/are pending in the application | | | | |
| 5 | 5a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 6)🛛 (| Claim(s) <u>76</u> is/are allowed. | | | | | |
| 7) 🛛 (| Claim(s) 1,2,11-15,35,36 and 44 is/are rejected. | | | | | |
| 8) 🛛 (| Claim(s) <u>7,16-18,26,47 and 49</u> is/are objected | to. | | | | |
| 9) 🗌 (| Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application | on Papers | | | | | |
| 10) The specification is objected to by the Examiner. | | | | | | |
| 11) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| , | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| 2 | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| (| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(| (e) | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| | e of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ite | | | |
| . — | nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date | 5) | atent Application | | | |
| S Patent and Tra | | o) | | | | |

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1. This Office action is in response to applicant's amendments and arguments as filed on 11/14/2011. Claims 1-2, 7, 11-18, 26, 35-36, 44, 47, 49, and 76 remain active in this application and an action on these claims follows. Claims 3-6, 8-10, 19-25, 27-34, 37-43, 45-46, 48, and 50-75 have been cancelled.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 11-15, 35-36, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Posson (4,220,087).

Posson (087) discloses a prolonged burning incendiary strand comprising:

a) a stand body (cord) of indeterminate length; 17

b) at least one solid fuel component; 18 or 23 or 26 or 42 or 68;

col. 2, lines 11-21

c) the fuel component being able to undergo self-sustained inherent ignition in the presence of oxygen;

d) flames emitted from the exterior surface of the strand; abstract, col. 4, lines 13-21

e) axial ignition means for initiating combustion of the 19 or 23; col. 4, lines 1-6 fuel component; and

f) flaming composition from ten seconds to five minutes. col. 4, lines 6-12

4. Applicant's arguments are addressed as follows. It is argued that since the Posson device acts rapidly it does not qualify as prolonged. This is not convincing. The Posson device acts in a

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prolonged fashion to begin activation at one end of the linear ignition fuse and with continued activation till the end of the fuse (see abstact and col. 4, lines 1-22). The device burns along the entire length of the device (see col. 4, lines 1-12). It is argued that the Posson device does not teach sustained combustion by separate elements arranged along the length of the device. This is also inaccurate. Posson teaches a device that is actuated by a primer or electric ignitor and then burn along the length of the device consuming and/or burning the constituent elements as it proceeds (see col. 4, lines 1-22 and col. 5, lines 45-65). With regard to the issue of the Posson device providing a rapidly progressing, short duration reaction, this may be the case. However, this has no bearing upon what is actually being claimed. Note that the rejected claims are directed to a device and not a way in which a particular device functions. With regard to the claimed elements of ignition means and a separate non-pyrotechnic fuel component; please see paragraph 3 above and items [19, 23], [18 or 23 or 26 or 42 or 68]. With regard to the issue of being free burning; such is clearly present in Posson (see abstract and col. 4, lines 1-22). With regard to the issue of utilizing atmospheric oxygen; although this feature may be present in Posson; this feature has not been claimed by applicant. It is argued that the Posson device is a "combustible fuel" rather than a "pyrotechnic composition". This argument is not understood in view of the fact that applicant is claiming a "combustible fuel" in claim 1. It is argued that the Posson device does not provide for sustained flame generation. This argument is also not accurate. See col. 1, lines 1-22 for evidence of flame generation along the length of the Posson device. With regard to the issue of sustained velocity at a slower rate to permit ignition of vegetative matter; none of these features are directed to any of the claims actually rejected and as such need not be further addressed. Applicant argues that usage of the terminology "combustible

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fuel component" limits the claim to materials that only utilize atmospheric oxygen for the combustion process. The examiner does not agree. A definition of the term "combustible" is provided by dictionary.com.

Dictionary.com

Combustible; adjective: 1. Capable of catching fire and burning; 2. Easily excited.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Posson (4,220,087) in view of Richardson et al. (3,712,222).

Posson (087) applies as previously recited. However, undisclosed is a fuel material that is a thermoplastic polymer. Richardson et al. (222) teach a fuel material that is a thermoplastic polymer (col. 4, lines 62-68). Applicant is substituting one fuel material for another in an analogous art setting as explicitly encouraged by the secondary reference (see col. 4, lines 62-68 of Richardson et al.) with expected or predictable results (see KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 406 (2007)). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Richardson et al. to the Posson incendiary strand and have an incendiary strand with a different type of fuel component.

7. Applicant's arguments are addressed as follows. It is argued that there is no reason for the secondary ignition of a separate combustible fuel element to provide for prolonged burning along the strand. In response, applicant does not appear to understand how Richardson is being applied.

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Richardson is only being relied upon to teach an alternative fuel material as explicitly encouraged by Richardson (see col. 4, lines 62-68 of Richarson). Posson is being relied upon to teach all other claim elements and these issues have been addressed in the preceding paragraphs. With regard to Richardson providing separate oxidant, fuel component of the incendiary strand. Once again, this is not how Richardson is being applied and has no relevance. Once again, Richardson is only being relied upon for its teaching of an alternative combustible fuel component. With regard to the issue of a fuel component that has a deflagrative reaction upon ignition; this feature has already been taught by Posson and discussed in the arguments. With regard to the issue of an oxygen generating component; Posson also teaches an oxidant (see col. 1, lines 44-63 of Posson).

With regard to the arguments directed to the way in which the device clears land; these features are not present in the rejected claims. With regard to the issues of a rapidly igniting and burning ignition device and ignition means and fuel components; see paragraphs 3 and 4 as they are directed to Posson above.

With regard to the request for assistance in finding allowable subject matter; note that the examiner has already indicated at least 8 claims as being directed to allowable subject matter (see claims 7, 16-18, 26, 47, 49 and 76).

- 8. Claims 7, 16-18, 26, 47, and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claim 76 is allowed.

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- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ezra et al. (3,751,954) disclose an ignition device.
- 11. Applicant's arguments filed on 11/14/2011 have been fully considered but they are not persuasive. These arguments have been addressed in the preceding paragraphs.
- 12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877 and whose e-mail address is (Stephen.Johnson@uspto.gov). The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The Central FAX phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

/Stephen M. Johnson/

Primary Examiner, Art Unit 3641

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SMJ

November 28, 2011